

DEPARTMENT OF PUBLIC WORKS

News Release

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Wastewater Management Division to conduct ocean study offshore from Lydgate Beach Park

LYDGATE – Starting May 23, the Department of Public Works, Wastewater

Management Division will be conducting a two-day ocean study in waters off Lydgate Beach

Park in Wailua.

The beach park will remain open to the public during the study.

The purpose of the study is to evaluate ocean characteristics including ocean current flow directions and the effects of ocean tides in the nearshore waters in the vicinity of the Wailua Wastewater Treatment Plant (WWTP) ocean outfall. It is a requirement of the County's National Pollutant Discharge Elimination System (NPDES) permit, issued by the State of Hawai'i, Department of Health (DOH).

The study will be performed by the County's consultant, Brown and Caldwell, between Monday, May 23 and Wednesday, May 25. During that time, a low concentration of non-toxic Rhodamine WT dye will be added to the tertiary-treated wastewater discharged to the ocean through the ocean outfall.

The dye, which may be visible locally as a pale pink coloration in the ocean, will be monitored to identify the ocean current flow direction and the amount of dilution and dispersion that occurs.

The study data will be used to develop a mathematical model of the ocean characteristics in the vicinity of the outfall. The field work portion of the study includes using boats to monitor dye concentrations, drogues to track ocean currents, and an Acoustic Doppler Current Profiler (ADCP), an instrumentation that will be placed on the ocean bottom to measure sea floor currents near the outfall. An aerial drone may be used to take photographs and aid water sampling in the vicinity of shallow reef waters.

County officials report that while the park and beach area will remain open to the public during the study, beachgoers should expect the above-listed activity in the waters of the study area.

The Wailua WWTP intermittently sends highly treated wastewater to the ocean outfall, which is a backup disposal method for the recycled water that is provided to the Wailua Golf Course for irrigation purposes. Approximately fifty percent of the wastewater treated by the Wailua WWTP is recycled for irrigation water at the Wailua Golf Course. The remaining treated wastewater is discharged to the ocean via the permitted ocean outfall.

For more information on the study, contact Wastewater Management Division Chief Ed Tschupp at 241-4084.